104TH CONGRESS 2D SESSION

H. R. 3331

To amend the Public Health Service Act to expand and intensify programs of the National Institutes of Health with respect to research and related activities concerning osteoporosis and related bone diseases.

IN THE HOUSE OF REPRESENTATIVES

APRIL 25, 1996

Ms. Eddie Bernice Johnson of Texas (for herself, Mrs. Morella, Mr. Hayes, Mr. Gene Green of Texas, Ms. Waters, Mr. Hilliard, Mrs. Meek of Florida, Mr. Frost, Mrs. Clayton, Ms. Lofgren, Ms. Norton, Mr. Frazer, Mr. Thompson, Mr. Towns, Miss Collins of Michigan, Mr. Evans, and Mrs. Kennelly) introduced the following bill; which was referred to the Committee on Commerce

A BILL

To amend the Public Health Service Act to expand and intensify programs of the National Institutes of Health with respect to research and related activities concerning osteoporosis and related bone diseases.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as the "Osteoporosis and Re-
- 5 lated Bone Diseases Research Act of 1996".

1 SEC. 2. FINDINGS.

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2	The Congress finds that—
3	(1) osteoporosis, or porous bone, is a condition
4	characterized by an excessive loss of bone tissue and
5	an increased susceptibility to fractures of the hip,
6	spine, and wrist;
7	(2) osteoporosis is a threat to an estimated
8	25,000,000 Americans, 80 percent of whom are
9	women, many of whose cases go undiagnosed be-
10	cause the condition develops without symptoms until
11	a strain, bump, or fall causes a fracture;
12	(3) between 3 and 4 million Americans have
13	Paget's disease, osteogenesis imperfecta,
14	hyperparathyroidism, and other related metabolic
15	bone diseases;
16	(4) osteoporosis is responsible for 1,500,000
17	bone fractures annually, including more than
18	250,000 hip fractures, $500,000$ vertebral fractures,
19	200,000 fractures of the wrist, and the remaining
20	fractures at other limb sites;
21	(5) 1 of every 2 women and 1 of every 8 men
22	over age 50 will develop fractures associated with
23	osteoporosis;
24	(6) direct medical costs of osteoporosis are esti-

mated to be \$10,000,000,000 annually for the Unit-

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- ed States, not including the costs of family care and
 lost work for caregivers;
 - (7) direct medical costs of osteoporosis are expected to increase precipitously because the proportion of the population comprised of older persons is expanding and each generation of older persons tends to have a higher incidence of osteoporosis than preceding generations;
 - (8) technology now exists, and new technology is developing, that will permit early diagnosis and prevention of osteoporosis as well as management of the condition once it has developed;
 - (9) funding for research on osteoporosis and related bone diseases is severely constrained at key research institutes, including the National Institute of Arthritis and Musculoskeletal and Skin Diseases, the National Institute on Aging, the National Institute of Diabetes and Digestive and Kidney Diseases, the National Institute of Dental Research, and the National Institute of Child Health and Human Development;
 - (10) further research is needed to improve medical knowledge concerning—
- 24 (A) cellular mechanisms related to the 25 processes of bone resorption and bone forma-

1	tion, and the effect of different agents on bone
2	remodeling;
3	(B) risk factors for osteoporosis, including
4	newly discovered risk factors, risk factors relat-
5	ed to groups not ordinarily studied (such as
6	men and minorities), risk factors related to
7	genes that help to control skeletal metabolism
8	and risk factors relating to the relationship of
9	aging processes to the development of
10	osteoporosis;
11	(C) bone mass measurement technology
12	including more widespread and cost-effective
13	techniques for making more precise measure-
14	ments and for interpreting measurements;
15	(D) calcium (including bioavailability, in-
16	take requirements, and the role of calcium in
17	building heavier and denser skeletons), and vi-
18	tamin D and its role as an essential vitamin in
19	adults;
20	(E) prevention and treatment, including
21	the efficacy of current therapies, alternative
22	drug therapies for prevention and treatment,
23	and the role of exercise; and
24	(F) rehabilitation; and

- 1 (11) further educational efforts are needed to
- 2 increase public and professional knowledge of the
- 3 causes of, methods for avoiding, and treatment of
- 4 osteoporosis.

5 SEC. 3. OSTEOPOROSIS RESEARCH.

- 6 Subpart 4 of part C of title IV of the Public Health
- 7 Service Act (42 U.S.C. 285d et seq.) is amended by adding
- 8 at the end the following new section:

9 "SEC. 442A. RESEARCH ON OSTEOPOROSIS AND RELATED

- 10 **DISEASES.**
- 11 "(a) Expansion of Research.—The Director of
- 12 the Institute, the Director of the National Institute on
- 13 Aging, the Director of the National Institute of Diabetes
- 14 and Digestive and Kidney Diseases, the Director of the
- 15 National Institute of Dental Research, and the Director
- 16 of the National Institute of Child Health and Human De-
- 17 velopment shall expand and intensify research on
- 18 osteoporosis and related bone diseases. The research shall
- 19 be in addition to research that is authorized under any
- 20 other provision of law.
- 21 "(b) Mechanisms for Expansion of Research.—
- 22 Each of the Directors specified in subsection (a) shall, in
- 23 carrying out such subsection, provide for one or more of
- 24 the following:
- 25 "(1) Investigator-initiated research.

1	"(2) Funding for investigators beginning their
2	research careers.
3	"(3) Mentorship research grants.
4	"(4) Specialized centers.
5	"(c) Authorization of Appropriations.—There
6	are authorized to be appropriated to carry out this section
7	\$30,000,000 for the National Institute of Arthritis and
8	Musculoskeletal and Skin Diseases, \$6,500,000 for the
9	National Institute on Aging, \$6,500,000 for the National
10	Institute of Diabetes and Digestive and Kidney Diseases,
11	\$4,000,000 for the National Institute of Dental Research,
12	and \$3,000,000 for the National Institute of Child Health
13	and Human Development for each of the fiscal years 1997
14	through 1999, and such sums as may be necessary for
15	subsequent fiscal years. These funds are in addition to
16	amounts authorized to be appropriated for biomedical re-
17	search relating to osteoporosis and related bone diseases
18	under any other provision of law.
19	"(d) RELATED BONE DISEASES DEFINED.—As used
20	in this section, the term 'related bone diseases' includes—
21	"(1) Paget's disease, a bone disease character-
22	ized by enlargement and loss of density with bowing
23	and deformity of the bones;
24	"(2) osteogenesis imperfecta, a familial disease
25	marked by extreme brittleness of the long bones:

1	"(3) hyperparathyroidism, a condition charac-
2	terized by the presence of excess parathormone in
3	the body resulting in disturbance of calcium metabo-
4	lism with loss of calcium from bone and renal dam-
5	age;
6	"(4) hypoparathyroidism, a condition character-
7	ized by the absence of parathormone resulting in
8	disturbances of calcium metabolism;
9	"(5) renal bone disease, a disease characterized
10	by metabolic disturbances from dialysis, renal trans-
11	plants, or other renal disturbances;
12	"(6) primary or postmenopausal osteoporosis
13	and secondary osteoporosis, such as that induced by
14	corticosteroids; and
15	"(7) other general diseases of bone and mineral
16	metabolism including abnormalities of vitamin D.".

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